

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A narrow-directivity antenna probe for performing the measurement of or the irradiation with an electric field or a magnetic field, comprising:

a main antenna probe for performing said measurement of or said irradiation with said electric field or said magnetic field; and

an opposite phase excited at least two or more directionality-adjusting antenna probe probes located in proximity to said main antenna probe in order to narrow the directionality of said main antenna probe;

wherein said directionality-adjusting antenna probes are fed with opposite-phase electric currents with respect to the phase of the electric current fed to said main antenna probe, and a phase difference between said main antenna probe and said directionality-adjusting antenna probes in a range of $\pi \pm \pi/2$ [rad].

Claim 2 (canceled)

3. (currently amended) The narrow-directivity antenna probe according to Claim 2, wherein said opposite phase excited directionality-adjusting antenna probes are located in proximity to said main antenna probe in a symmetric arrangement.

4. (currently amended) The narrow-directivity antenna probe according to

Claim 17, wherein a supply electric-power to said ~~opposite-phase-excited~~
~~directionality-adjusting~~ antenna ~~probe-probes~~ is made smaller than a supply electric-
power to said main antenna probe, or a reception electric-power of said ~~opposite-~~
~~phase-excited~~~~directionality-adjusting~~ antenna ~~probe-probes~~ is attenuated and
superimposed on a reception signal of said main antenna probe, or the size of said
~~opposite-phase-excited~~~~directionality-adjusting~~ antenna ~~probe-probes~~ is made
smaller than that of said main antenna probe, said ~~opposite-phase-excited~~
~~directionality-adjusting~~ antenna ~~probe-probes~~ being located in order to narrow said
directionality of said main antenna probe for performing said measurement of or said
irradiation with said electric field or said magnetic field.

5. (currently amended) The narrow-directivity antenna probe according to

Claim 17, wherein an electromagnetic field generated by said ~~opposite-phase~~
~~excited~~~~directionality-adjusting~~ antenna ~~probe-probes~~ has a phase difference of $\pi \pm$
 $\pi/2$ [rad] with respect to an electromagnetic field generated by said main antenna
probe, said ~~opposite-phase~~~~excited~~~~directionality-adjusting~~ antenna ~~probe-probes~~
being located in order to narrow said directionality of said main antenna probe for
performing said measurement of or said irradiation with said electric field or said
magnetic field.

6. (previously presented) A narrow-directivity antenna probe system for using
said narrow-directivity antenna probe according to Claim 17 in plural number so as to
isolate and observe electromagnetic fields from wave sources existing in a desired
spacious region, or so as to superimpose electromagnetic fields on each other in a

desired spacious region thereby to generate an electromagnetic field that is more intense than said electromagnetic field generated in the case of said single narrow-directivity antenna probe.

7. (previously presented) An electromagnetic-field measurement apparatus for using said narrow-directivity antenna probe according to Claim 17 so as to measure the proximate electric-field or magnetic-field distribution in proximity to an electronic appliance or the like.

8. (previously presented) An electric-current distribution search-for apparatus for using said narrow-directivity antenna probe according to Claim 17 so as to measure the proximate electric-field or magnetic-field distribution in proximity to an electronic appliance or the like, and for determining said electric-current distribution by calculation from a result of said measurement.

9. (previously presented) An electrical-wiring diagnosis apparatus for using said narrow-directivity antenna probe according to Claim 17 so as to irradiate an electronic appliance or the like with an electric field or a magnetic field, and for detecting a signal thereby to check the electrical-wiring connection state of said electronic appliance or the like, said signal being generated at a terminal of said electronic appliance or the like by an electric voltage or an electric current induced by said electric field or said magnetic field.

10. (currently amended) A narrow-directivity antenna probe for performing the measurement of or the irradiation with an electric field or a magnetic field, comprising:

a main antenna probe for performing said measurement of or said irradiation with said electric field or said magnetic field, and

~~a-at least one~~ grounded-electric-potential conductive flat-plate located in proximity to said main antenna probe in order to narrow the directionality of said main antenna probe.

11. (Currently Amended) The narrow-directivity antenna probe according to Claim 10, wherein at least 17, comprising said two or more of said grounded-electric-potential conductor conductive flat-plates are provided.

12. (Currently Amended) The narrow-directivity antenna probe according to Claim 17 11, wherein said grounded-electric-potential conductor flat-plates are located in proximity to said main antenna probe in a symmetric arrangement.

13. (Original) A narrow-directivity antenna probe system for using said narrow-directivity antenna probes according to Claim 10 in plural number so as to isolate and observe electromagnetic fields from wave sources existing in a desired spacious region, or so as to superimpose electromagnetic fields on each other in a desired spacious region thereby to generate an electromagnetic field that is more intense than said electromagnetic field generated in the case of said single narrow-directivity antenna probe.

14. (Original) An electromagnetic-field measurement apparatus for using said narrow-directivity antenna probe according to Claim 10 so as to measure the proximate electric-field or magnetic-field distribution in proximity to an electronic appliance or the like.

15. (Original) An electric-current distribution search-for apparatus for using said narrow-directivity antenna probe according to Claim 10 so as to measure the proximate electric-field or magnetic-field distribution in proximity to an electronic appliance or the like, and for determining said electric-current distribution by calculation from a result of said measurement.

16. (Original) An electrical-wiring diagnosis apparatus for using said narrow-directivity antenna probe according to Claim 10 so as to irradiate an electronic appliance or the like with an electric field or a magnetic field, and for detecting a signal thereby to check the electrical-wiring connection state of said electronic appliance or the like, said signal being generated at a terminal of said electronic appliance or the like by an electric voltage or an electric current induced by said electric field or said magnetic field.

17. (currently amended) A narrow-directivity antenna probe for performing the measurement of or the irradiation with an electric field or a magnetic field, comprising:

a main antenna probe for performing said measurement of or said irradiation with said electric field or said magnetic field; and

a- at least one member located in proximity to said main antenna probe in order to narrow the directionality of said main antenna probe,

wherein the at least one member is at least one of an opposite phase excited at least two directionality-adjusting antenna probe probes and a at least one grounded-electric-potential conductive flat-plate;

wherein said directionality-adjusting antenna probes are fed with opposite-phase electric currents with respect to the phase of the electric current fed to said main antenna probe, and a phase difference between said main antenna probe and said directionality-adjusting antenna probes in a range of $\pi \pm \pi/2$ [rad].

18. (currently amended) The narrow-directivity antenna probe according to Claim 17, comprising only the opposite phase excited directionality-adjusting antenna probe probes.

19. (new) The narrow-directivity antenna probe according to Claim 17, comprising only the at least one grounded-electric-potential conductive flat plate.

20. (new) The narrow-directivity antenna probe according to Claim 17, wherein the main antenna probe and the directionality-adjusting antenna probes are loop antennas.